



*"A partnership to nurture continuing educational excellence"*

**The Southern Alberta  
Professional Development Consortium  
Regional Mathematics Implementation Plan  
2010 – 2011  
(Year 3)**

**Submitted to Alberta Education**

**by:**

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<b>Desired Results</b>	
<p><b>Established Goal:</b> To provide effective professional development opportunities for implementation of the revised Mathematics Program of Studies to all Grades K – 12 Mathematics teachers, administrators and curriculum leaders in the SAPDC region. The focus is to enhance professional practice and build capacity, ultimately promoting and enhancing student learning. The specific target audience is educators of the Mathematics 20 level courses in preparation for 2010-2011 pre- implementation, as well as those for which implementation of the revised Mathematics Program of Studies is already mandatory.</p>	
<p><b>Enduring Understandings:</b>  <i>“The primary purpose of public schooling is to promote student learning. Research has shown student learning is enhanced when jurisdiction staff have access to effective professional development. Professional development should focus on enhancing professional practice and building capacity.”</i> A Guide to Comprehensive Professional Development Planning</p> <p><i>“Successful implementation requires the coordinated, collaborative, and comprehensive efforts of education partners working together towards a shared vision of learning success for all students.”</i> A Guide to Support Implementation: Essential Conditions</p>	<p><b>Essential Questions:</b>  <i>What professional development have grades K – 12 Mathematics teachers and administrators in the SAPDC region had access to, and has it been effective?</i></p> <p><i>Have the professional learning opportunities that the SAPDC, working together with other PD providers, been successful in enhancing professional practice and building capacity? If so, what professional practices are now being seen in classrooms which reflect the revised Mathematics P of S, and promote and enhance student learning?</i></p>
<p><b>Results:</b>  As a result of the professional development opportunities the SAPDC, working together with other PD providers, have offered to support implementation of the revised Mathematics P of S to all Grades K – 12 Mathematics teachers and administrators in the SAPDC region, professional practice will be enhanced, capacity built, and ultimately, learning success for all students.</p>	
<b>Evidence of Success</b>	
<p><b>Quantitative Indicators and Evidence:</b></p> <ul style="list-style-type: none"> <li>• Number of regional and district sessions</li> <li>• Number of participants who attended regional and district sessions as per attendance data</li> <li>• Percentage of participant intent to change practices, and satisfaction with both regional and district sessions as per the ARPDC Feedback forms throughout the year</li> <li>• Percentage of stakeholders comfortable with teaching the revised P of S, as well as greatest areas of need as per the year end survey</li> <li>• Percentage of stakeholders implementing formative and performance-based assessment as well as greatest areas of need with regards to assessment, as per the year end survey</li> </ul> <p>Mathematics courses on the SAPDC moodle</p> <ul style="list-style-type: none"> <li>• Monthly comparison of number of views</li> <li>• Monthly comparison of number of users</li> <li>• Monthly comparison of number of participants who contribute to the 10C and 10-3 courses</li> <li>• Percentage of participants satisfied with the Mathematics courses on the moodle site as per year end survey</li> </ul>	<p><b>Qualitative Indicators and Evidence:</b></p> <ul style="list-style-type: none"> <li>• District curriculum leader satisfaction with district delivered sessions as reported on the Post Session Reporting form throughout the year</li> <li>• Participant comments re: change of practice in the areas of planning, instructional strategies, student engagement and/or assessment as reported on the: <ul style="list-style-type: none"> <li>○ SAPDC teacher “Evidence of Success” reporting form throughout the year</li> <li>○ year end survey</li> </ul> </li> <li>• Administrator observation of teaching practices including planning, assessment, instructional strategies, and student engagement as per the year end SAPDC Administrator “Evidence of Success” reporting form</li> <li>• Anecdotal stakeholder feedback re: the Mathematics courses on the moodle site as per year end survey results</li> </ul>

## SAPDC Action Plans for Grant Deliverables as they apply to Implementation of the Revised Mathematics Program of Studies

<p>1. Annual base funding of \$75,000 will be provided to assist with operational and equity issues. This is targeted for such items as administrative support, coordination, research, staffing, sustainable human resources funds, for teleconferencing /videoconferencing, etc.</p>	<p><b>Action:</b> SAPDC will use the \$75,000 to maintain office staff to support the operational work of the consortium. The consortium has experienced considerable growth in all areas including Mathematics, in the number of workshop offerings, meetings, and implementation support staff, as well as increased record-keeping and reporting.</p>
<p>2. Annual proportional funding in the amount of \$267,000 is provided to the consortium for Implementation of new and revised programs of study in the pre-implementation and mandatory implementation years.</p> <p style="padding-left: 40px;"><i>Implementation strategies are as follows:</i></p> <p>a. collaborate with regional advisory Committees and other consortia to develop implementation plans, strategies and opportunities to meet provincial and locally identified needs in congruence with provincial direction.</p>	<p><b>Action:</b> SAPDC has designated, as required, 65% of their Implementation Grant \$173,550, plus a 2009-2010 carry forward of 160,925 and an unspecified carry forward of \$30,000 to support implementation of the revised Mathematics P of S from September 2010 through August 2011.</p> <p>Thirteen members representing each of the ten districts, rural and urban, and the various divisions including Central Office, Administrator, teacher, ATA, and SAPDC representation will continue to make up the SAPDC Mathematics Advisory Committee. They will continue to meet three times per year. Information will be housed on the SAPDC moodle site.</p> <p>SAPDC will continue to work closely with other consortia as follows:</p> <ul style="list-style-type: none"> <li>• meeting monthly with the regional Mathematics team</li> <li>• collaborating on presenters and sessions</li> <li>• offering VC and Elluminate sessions province wide</li> <li>• posting cached webinars to the arpdC website</li> <li>• sharing materials including two parent podcasts (Grades K – 9 and high school) with all consortia via the SAPDC moodle site</li> <li>• partnering with CARC who has teachers posting 10-3 Mathematics lessons, etc., to the SAPDC moodle</li> <li>• opening both the 10C and 10-3 courses, which are housed on the SAPDC moodle site, to all high school Mathematic teachers across the province</li> <li>• hosting the High School Mathematics Institute including regular meetings with Mathematics team members and AB ED via Elluminate, and housing all Institute information, past and present, on the SAPDC moodle site</li> <li>• exploring further partnerships with MCATA</li> </ul>
<p>b) develop a regional professional development plan to support implementation including a work plan and budget submitted by October 31, 2010.</p>	<p><b>Action:</b> The SAPDC PD plan follows the PD planning cycle and data from previous years informs the actions. It is written in a UbD format and includes:</p> <ul style="list-style-type: none"> <li>• action for all grant deliverables</li> <li>• specific goals and strategies as well as PD planned to date to provide continued ongoing professional learning opportunities in the areas recommended including, but not limited to:</li> </ul>

	<ul style="list-style-type: none"> <li>○ effective integration of technology</li> <li>○ designing performance based assessment</li> <li>○ job-embedded professional learning, including, but not limited to Implementation Support Teacher providing district sessions as well as teaching a 10C class and posting lessons, reflections, resources, etc., on the SAPDC moodle site</li> <li>○ opportunities for administrators to develop more familiarity with the revised P of S</li> <li>○ professional learning opportunities for parents</li> <li>● Quantitative and qualitative data will continue to inform the plan to ensure continued successful implementation. In addition to indicators used last year, SAPDC will continue to explore capturing teacher practices in classrooms using video footage for evidence of successful implementation of the revised P of S.</li> </ul>
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<p><b>Goal 1:</b> <b>To support regional curriculum implementation</b></p> <p><b>Strategy 1</b> To support educators involved in teaching the revised curriculum that is mandatory during the 2010-2011 and 2011-2012 school years.</p> <p><b>Strategy 2</b> To support educators who are involved already in implementing revised curriculum</p> <p>Support includes: Capacity building Support for Administrators Delivery via Distributed Learning</p>	<p><b>PD planned to date to address Goal 1, Strategy 1:</b></p> <ul style="list-style-type: none"> <li>• 1-day sessions - Math for those new to Grades 3,6,9 and 10 and for those who need a refresher – DeCoste (face to face in Medicine Hat and Lethbridge)</li> <li>• 2-day series for all grades K – 10 – Making Connections with Math – DeCoste (face-to-face in Medicine Hat and Lethbridge)</li> <li>• Mathematics 10C course taught by SAPDC Implementation teachers Bonnie Layton (semester) and Mary Jo Rawleigh (quarter system) and lessons, reflections, resources, etc., posted daily on the SAPDC moodle site and available to all high school Mathematics teachers across the province</li> <li>• Mathematics 10-3 course taught by 2 teachers in CARC and lessons, reflections, and resources also posted on SAPDC moodle site and available to all high school Mathematics teachers across the province</li> <li>• 2-part series – High School – Strengthening Teaching and Learning of High School Mathematics – Leinwand (face-to-face in Lethbridge and VC throughout the SAPDC region with two province-wide webinars in the spring)</li> <li>• As part of the DPL Demonstration Project, Mary Jo Rawleigh will lead a 4 part series Cohort of 10C teachers on differentiation at the high school level (face-to-face and VC sessions as well as required attendance at various learning opportunities being offered)</li> <li>• Book Study – Rawleigh – Changing Faces in Mathematics: An Aboriginal Perspective – December through April (face-to-face and VC across the province)</li> <li>• Implementation Support Teacher, Mary Jo Rawleigh, will present on implementation of 10C and/or 20 level course at various conventions</li> <li>• Implementation Support Teacher, Mary Jo Rawleigh, will provide professional development on the SAPDC 10C and CARC 10-3 moodle courses posted on the SAPDC moodle site, at MCATA</li> <li>• Resources provided on the SAPDC website</li> <li>• Promotion of other consortia sessions</li> <li>• Promotion of ARPDC site for cached webinars</li> <li>• Promotion of attendance at MCATA</li> <li>• Distributed Learning Grade 10 Mathematics Courses – Alberta Education (session being planned for spring delivery)</li> <li>• Implementation Count-down: Grade 11 Mathematics Courses – Alberta Education (session being planned for spring delivery)</li> </ul> <p><b>PD planned to date to address Goal 1, Strategy 2:</b></p> <ul style="list-style-type: none"> <li>• 3-part planning series – Understanding by Design – Clayton (supper club in Lethbridge and full day sessions in Medicine Hat)</li> <li>• Mathematics Tool Kit – aimed at curriculum leaders of Grades K – 9 – developed by Bennett and DeCoste (face-to-face and via VC throughout the region, and via Elluminate to other consortia Mathematic consultants for roll out across the province. Cached webinar to be posted on arpdc website)</li> <li>• 2-day series for all Grades K – 10 – Making Connections with Math – DeCoste (face-to-face in Medicine Hat and Lethbridge)</li> <li>• 1-day session for elementary grades – Literature &amp; Mathematics – De Coste – (face-to-face from Lethbridge and VC throughout the SAPDC region)</li> <li>• 2 part province wide webinar series – Div II – Teaching Mathematics in Multigrade Classroom – Small (cached webinars to be posted on arpdc website)</li> <li>• 2-day Institute – Pre K – 2 – Early Number Sense – Fosnot (face-to-face in Lethbridge possibly with follow-up webinars)</li> <li>• 2-day Institute – Grades 3 – 5 – Mult and Division -- Fosnot (face-to-face in Lethbridge possibly with follow-up webinars)</li> </ul>
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<p><b>Goal 2:</b> <b>To support district plans and needs</b></p> <p><b>Strategy 1</b> To support common region and district needs</p> <p><b>Strategy 2</b> To provide Implementation Support Teachers to districts to assist in meeting district needs</p> <p>Support includes: Capacity building Support for Administrators Delivery via Distributed Learning</p>	<ul style="list-style-type: none"> <li>• 1-day session – Grades 7 – 9 – Developing Thinking in Mathematics– Brown (face-to-face in Lethbridge)</li> <li>• AB ED sessions re: PATs and diplomas (face-to-face in Medicine Hat and Lethbridge and via VC as applicable)</li> <li>• Resources on SAPDC website</li> <li>• ARPDC website for cached webinars</li> <li>• Alberta PD website to access information on differentiation and participate in the project</li> <li>• Promotion of other consortia sessions</li> <li>• Promotion of attendance at MCATA</li> <li>• Distributed Learning Grade 9 Mathematics Course – Alberta Education (session being planned for spring delivery)</li> <li>• 1-day session – Grades K – 12 – Learn Alberta for Mathematics (delivered in Medicine Hat and Lethbridge with VC to district sites. Session being planned for spring delivery)</li> </ul> <p><b>PD planned to date to support Goal 2, Strategy 1:</b></p> <ul style="list-style-type: none"> <li>• 2 parent podcasts, one K – 9 implementation and one for high school implementation (available to all parents, schools, and districts across the province via the SAPDC moodle site)</li> <li>• SMART Math Tool session organized by CARC accessed by districts in SAPDC via VC</li> <li>• Fall requests from districts to provide a curriculum update for administrators and address what they will see in classrooms implementing the revised P of S (being planned to involve classroom teachers in Zone 6)</li> <li>• Resources on SAPDC website and moodle site</li> <li>• ARPDC website for cached webinars</li> <li>• Alberta PD website</li> <li>• Promotion of other consortia sessions</li> <li>• Promotion of attendance at MCATA</li> </ul> <p><b>PD planned to date to support Goal 2, Strategy 2</b></p> <ul style="list-style-type: none"> <li>• Provision of 3 days per district to access SAPDC Implementation Support Teacher, Mary Jo Rawleigh, from Nov 5th, 2010 through April 7th, 2011</li> <li>• Series of four supper club Collaborative Work Sessions – Rawleigh (to take place in each of the 10 districts in SAPDC on a monthly basis from November through April)</li> <li>• Provision of 2 days per district to access SAPDC Technology Implementation Teacher, Ken Hakstol,</li> <li>• Resources on SAPDC <a href="http://sapdc.ca">website (http://sapdc.ca)</a> and <a href="http://moodle.sapdc.ca/moodle/">moodle site (http://moodle.sapdc.ca/moodle/)</a></li> <li>• ARPDC website for cached webinars</li> <li>• Alberta PD website</li> <li>• Promotion of other consortia sessions</li> <li>• Promotion of attendance at MCATA</li> </ul>
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<p>c) <i>integrate strategic priorities and initiatives as outlined within the Alberta Education Business Plan as part of the implementation plan.</i></p>	<p><b>Action:</b> As Mathematics is not part of the AB ED business plan this deliverable is not applicable to the Mathematics Implementation Plan</p>
<p>d) <i>be responsive with built in flexibility to best serve the needs of school authority personnel within the area or zone offering a wide variety of approaches and opportunities. Emerging technologies within the plan will allow for increased variety for adults to learn.</i></p>	<p><b>Action:</b></p> <ul style="list-style-type: none"> <li>• As identified throughout the Plan, SAPDC will provide a wide variety of activities and opportunities which include, but are not limited to capacity building, familiarity with programs of studies, facilitating assessment practices, establishing communities of teaching and learning practice based on related research, incorporating emerging technologies and assisting school authorities with their implementation plans and delivery models / approaches.</li> <li>• Responsiveness and flexibility are built into the planning process and are integral components of the plan.</li> <li>• SAPDC will share information for curriculum leaders on the Mathematics moodle site</li> </ul>
<p>e) <i>work with and model: A Guide to Comprehensive Professional Development Planning document</i></p>	<p><b>Action:</b></p> <ul style="list-style-type: none"> <li>• The Guide has been used in developing this SAPDC plan</li> <li>• Support in using the Guide will be provided to districts by: <ul style="list-style-type: none"> <li>○ meeting with district leaders at year end and/or in the fall to discuss district implementation plans, provide further SAPDC evidence and indicators from the previous year, and provide assistance in working through the Guide to develop and/or add to their plan.</li> <li>○ sharing SAPDC evidence and indicators from various feedback forms throughout the year and the annual SAPDC/Zone 6 and/or Mathematics survey at year end</li> </ul> </li> </ul>
<p>f) <i>consult with key AB ED Lead Managers and Directors a minimum of twice during the year as well as on a needs basis to help allocate funding parameters and priorities. Additionally EDs will collaborate with one another to establish relative consistency or commonality across the province.</i></p>	<p><b>Action:</b> SAPDC will continue to consult with AB ED and have discussions with other consortia with regards to:</p> <ul style="list-style-type: none"> <li>• direction for the development of plans to support implementation of revised curriculum with an emphasis on what constitutes "Evidence of Success"</li> <li>• applying a backwards design approach to future grants so that a clearer direction is set and it is known in advance what data needs to be gathered for reporting</li> </ul>
<p>g) <i>develop processes and tools to assist school authorities in the collection as well as tracking and reporting of "evidence of success" of effective implementation.</i></p>	<p><b>Action:</b> SAPDC will continue to:</p> <ul style="list-style-type: none"> <li>• participate in ARPDC stakeholder committees addressing essential conditions for successful implementation and 'evidence of success'</li> <li>• provide assistance to districts including sharing of indicators and evidence of success data</li> </ul>

<p>h) <i>collaborate with other P.D. providers and stakeholders (e.g. AAC, Galileo, 2Learn, ATA, ADETA, and Alberta Post Secondary Institutions) in the planning and development of program offerings and supports.</i></p>	<p><b>Action:</b> Collaboration will continue including, but not limited to working with:</p> <ul style="list-style-type: none"> <li>• AB ED, presenting sessions such as those pertaining to the PATs, diplomas and philosophy of new curriculum, involvement with planning the Institute, and recommendations pertaining to implementation</li> <li>• the Alberta PD project, including a cohort project on differentiation in the Mathematics 10C classroom</li> <li>• the AAC, including one SAPDC implementation support teacher presenting at the AAC conference</li> <li>• MCATA, including collaborating on presenters and exploring further avenues for partnering</li> <li>• SMART, including sessions on integration of technology into Mathematics, Math Tools, etc.</li> <li>• the southern Alberta Interjurisdictional group comprised of 7 of the 10 districts in the SAPDC region who are focusing on developing lessons which integrate technology and Mathematics, perhaps by sharing resources</li> <li>• the ATA, and the possibility of accessing sessions offered</li> <li>• universities, and the possibility of accessing curriculum leaders at this level to present sessions as well as providing the opportunities for more curriculum leaders and student teachers to access sessions offered by SAPDC</li> </ul>
<p>i) <i>provide a Final Report, which is to include financial information, on or before November 30, 2010 Including a work plan which contains the following:</i></p> <ul style="list-style-type: none"> <li>• data from key indicators relative to evidence of success observations and inferences, reflections and recommendations from implementation features supported and accomplished</li> </ul>	<p><b>Action:</b> The Mathematics report, including financial information as well as information relative to evidence of success along with key indicators and implementation features supported and accomplished during the 2010-2011 implementation year will be submitted as directed.</p> <p>SAPDC will continue the conversation with AB ED as to what constitutes 'Evidence of Success' so that these indicators can be built into an implementation plan complete with goals and implementation strategies to be supported and accomplished.</p>
<p>j) <i>deliver the Mathematics Institutes if Alberta Education and stakeholders determines that the institutes are to occur. Alberta Education will provide organizational support and the ARPDC will appoint a Consortia Project Lead. Costs / expenses for these will be shared by all seven consortia on a proportional basis.</i></p>	<p><b>Action:</b> The SAPDC will be hosting the third High School Mathematics Institute in January, 2011. Work to date includes:</p> <ul style="list-style-type: none"> <li>• Three planning meetings with AB ED and regional Mathematics committee members in September and October, 2010, have taken place and will continue on a regular basis.</li> <li>• The SAPDC moodle site will house all information including information on the previous Institutes.</li> <li>• Keynote, Marian Small will present on differentiation in the high school classroom and will involve SAPDC Implementation Support Teachers in delivering the message. The presentation will include video footage of "what implementation of the revised P of S with regards to differentiation looks like in the high school classroom."</li> </ul>



	<ul style="list-style-type: none"> <li>• A webcast will be used to connect regional sites where face-to-face sessions will be held.</li> <li>• Two follow-up province wide webinars will take place in the spring. Webinars will be archived on the arpdC site.</li> <li>• An invitation will be extended to Minister Hancock to deliver an opening speech.</li> </ul>
k) <i>coordinate, as determined in advance other "one-time" events.</i>	<b>Action:</b> A regional and/or province wide Mathematics fair to showcase project-based learning projects which have been developed by teachers over the past three years is being considered.
l) <i>employ subject area(s) coordinator/consultant(s) to help facilitate effective implementation and delivery plans</i>	<p><b>Action:</b></p> <p>Based on a very successful year in 2009-10 with the hiring of a Program Coordinator, Marg Jenkins has been hired as Curriculum Implementation Coordinator for Mathematics, and other areas. Marg will continue to assist with the collaboration, and to manage the project coordination and administration that is necessary in implementation of revised curriculum and AB ED business priorities. Her work with Mathematics will include, but is not limited to:</p> <ul style="list-style-type: none"> <li>• ongoing and consistent communication and work with districts, other consortia, Alberta Education and other PD providers</li> <li>• supervision of Implementation Support Teachers</li> <li>• facilitation of regional and district sessions including the provincial high school Mathematics Institute</li> <li>• development and implementation of plans and reports</li> <li>• overall supervision of the SAPDC moodle site and Mathematics portion of the website</li> </ul> <p>The work of the Curriculum Implementation Coordinator will continue to be necessary if we are to work together, and not simply side by side to develop and implement the revised Mathematics P of S and other AB Ed business priorities, and provide optimum learning opportunities for educators in Zone 6 and ultimately, to the children in our care.</p> <p>Based on the very successful model of the SAPDC Mathematics Implementation Support Teacher model in 2009-10 Bonnie Layton and Mary Jo Rawleigh have been hired part time as Mathematics Implementation Support Teachers. Bonnie's half time focuses on Math 10C and Mary Jo is 0.6 focusing on high school Mathematics. Both are teaching the Mathematics 10C course and posting their lessons, reflections, resources, etc., on the moodle site. Mary Jo will also be providing district and regional sessions.</p> <p>As the SAPDC Mathematics plan will continue to include emerging technologies and alternate forms of professional development delivery including technology mediated forms of professional learning, Ken Hakstol has been hired to continue to assist with technology implementation support in Mathematics and other areas.</p>

## SAPDC Mathematics Implementation Project Budget 2010-2011

### REVENUE:

AE Allocation (65%)	173,550
Carry Forward 09-10	160,925
Unspecified Carry Forward **	30,000
<b>TOTAL REVENUE</b>	<b>\$364,475</b>

### EXPENDITURES

#### Learning Opportunities

Regional Level PD	60,000
District Delivered PD Allocation	25,000
Regional Consultants Expenses	10,000
ARPDC Secondary Institute	20,000
Workshop expenses (Copying & Materials)	10,000
Professional Resources	3,000
Administrator Toolkit	6,000
Administrator Sessions	\$2,000
<b>Total</b>	<b>\$136,000</b>

#### Administration

Implementation Support	
Secondments **	180,711
Consultant Expenses (Travel within region, etc.)	20,000
Regional Advisory Committee	5,000
Exec Dir and Program Services	
Mtgs/Expenses	8,000
<b>Sub-total</b>	<b>\$213,711</b>

**TOTAL Committed** **\$349,711**

Contingency for Programs	\$10,000
Contingency for Administration	\$4,764

Revenue – Expenditures

(\$0)